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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,643	10/24/2003	Chris Herndon	NC 84,339	7619

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NAVAL RESEARCH LABORATORY  
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WASHINGTON, DC 20375-5320

EXAMINER
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SAFAIPOUR, BOBBAK

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

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If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/691,643

Applicant(s)

HERNDON ET AL.

Examiner

Bobbak Safaipoor

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/27/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

### *Information Disclosure Statement*

The information disclosure statement submitted on 7/24/2004 has been considered by the Examiner and made of record in the application file.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1-2, 4-6, 8, 10-17, 19-21, 23, 25-38** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gutman et al (US Patent Application Publication #2002/0101831 A1)** in view of **Lesesky et al (US Patent Application Publication #2004/0233284 A1)** and in further view of **Modzelesky et al (US Patent Application Publication #2001/0012775 A1)**.

Consider **claim 1**, Gutman et al disclose a mobile communications infrastructure platform, comprising: a networking module including a plurality of inputs and outputs and including a POTS line connection (figures 1 and 2; paragraphs 21, 24, and 41); a satellite module (read as satellite earth station) coupled to said networking module for uplinking and downlinking a satellite datastream with a communications satellite (figures 1 and 2, paragraph 30); and a wireless telecommunications module (read as mobile communication facility) bidirectionally coupled to said networking module for receiving telecom data from and transmitting telecom data to said networking module, said wireless telecommunications module (figures 1 and 2, paragraphs 28-30 and 39-47) including: a VOIP interface coupled to said networking module (figures 1-2, paragraphs 28, 30 and 42; read as voice/IP converter); and a land mobile radio coupled to said VOIP interface (figures 1-2, paragraphs 28, 30, 42; read as voice/IP converter includes a telephone port adapted to telephonic devices).

Gutman et al fail to disclose a video module for providing a video datastream to said networking module and a private cellular network for providing private wireless cellular service independent of commercial cellular providers.

In related art, Lesesky et al disclose an apparatus and method which comprises a camera and light source for location at a point of interest wherein pictures and video from the camera is transmitted to a remote location where it may be viewed by an interested party. The apparatus uses satellite technology to transmit the data from the camera to the location. (abstract)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the video module of Lesesky et al into the mobile auxiliary communications facility of Gutman et al to gather video data and transmit the data to a remote location for monitoring.

Furthermore, in related art, Modzelesky et al disclose a satellite communication system providing voice and data transmission between mobile earth terminals and earth stations that act as gateways associated with private networks. The users of the satellite network communications services access the satellite network system via private terrestrial networks. (abstract, paragraph 16)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the private network of Modzelesky et al into the mobile auxiliary communications facility of Gutman et al and video module of Lesesky et al in order to meet specified technical performance criteria and interact with the network communication controllers.

Consider **claim 16**, Gutman et al disclose a mobile infrastructure linkage system, comprising: an earth station (figures 1 and 2); a networking module including a plurality of inputs and outputs and including a POTS line connection (figures 1 and 2; paragraphs 21, 24, and 41); a satellite module (read as satellite earth station) coupled to said networking module for uplinking and downlinking a satellite datastream with a communications satellite (figures 1 and 2, paragraph 30); and a wireless telecommunications module (read as mobile communication facility) bidirectionally coupled to said networking module for receiving telecom data from and transmitting telecom data to said networking module, said wireless telecommunications module (figures 1 and 2, paragraphs 28-30 and 39-47) including: a VOIP interface coupled to said networking module (figures 1-2, paragraphs 28, 30, and 42; read as voice/IP converter); a land mobile radio coupled to said VOIP interface (figures 1-2, paragraph 28, 30, and 42; read as voice/IP converter includes a telephone port adapted to telephonic devices).

Gutman et al fail to disclose a video module for providing a video datastream to said networking module and a private cellular network.

In related art, Lesesky et al disclose an apparatus and method which comprises a camera and light source for location at a point of interest wherein pictures and video from the camera is transmitted to a remote location where it may be viewed by an interested party. The apparatus uses satellite technology to transmit the data from the camera to the location. (abstract)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the video module of Lesesky et al into the mobile auxiliary communications facility of Gutman et al to gather video data and transmit the data to a remote location for monitoring.

Furthermore, in related art, Modzelesky et al disclose a satellite communication system providing voice and data transmission between mobile earth terminals and earth stations that act as gateways associated with private networks. The users of the satellite network communications services access the satellite network system via private terrestrial networks.

(abstract, paragraph 16)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the private network of Modzelesky et al into the mobile auxiliary communications facility of Gutman et al and video module of Lesesky et al in order to meet specified technical performance criteria and interact with the network communication controllers.

Consider **claim 30**, Gutman et al disclose a method of establishing a mobile infrastructure linkage system at a desired location, comprising: providing a mobile communications infrastructure platform comprising: a networking module including a plurality of inputs and outputs and including a POTS line connection (figures 1 and 2; paragraphs 21, 24, and 41); a satellite module (read as satellite earth station) coupled to said networking module for uplinking and downlinking a satellite datastream with a communications satellite (figures 1 and 2, paragraph 30); and a wireless telecommunications module (read as mobile communication facility) bidirectionally coupled to said networking module for receiving telecom data from and transmitting telecom data to said networking module, said wireless telecommunications module (figures 1 and 2, paragraphs 28-30 and 39-47) including: a VOIP interface coupled to said networking module (figures 1-2, paragraphs 28; read as voice/IP converter); a land mobile radio

Art Unit: 2618

coupled to said VOIP interface (figures 1-2, paragraph 30; read as voice/IP converter includes a telephone port adapted to telephonic devices); establishing a satellite signal link to said platform (paragraph 28; A satellite-equipped communications link provides one or more IP communication pathways between a gateway hub and a mobile auxiliary communications facility. These communication pathways are used to implement bi-directional telephonic and data communication links.); booting platform computers, networking modules, and wireless modules (paragraphs 28, 30, and 42); programming the land mobile radio to a specific region or agency (paragraph 1; read as locations where access to a terrestrial network has been interrupted, or locations where a terrestrial network is not functional); commencing satellite signal acquisition (paragraphs 28, 32, and 39-47); and establishing a satellite communications link between the platform and a second system node (paragraphs 28, 32, and 39-47).

Gutman et al fail to disclose a video module for providing a video datastream to said networking module and a private cellular network.

In related art, Lesesky et al disclose an apparatus and method which comprises a camera and light source for location at a point of interest wherein pictures and video from the camera is transmitted to a remote location where it may be viewed by an interested party. The apparatus uses satellite technology to transmit the data from the camera to the location. (abstract)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the video module of Lesesky et al into the mobile auxiliary communications facility of Gutman et al to gather video data and transmit the data to a remote location for monitoring.



Art Unit: 2618

Furthermore, in related art, Modzelesky et al disclose a satellite communication system providing voice and data transmission between mobile earth terminals and earth stations that act as gateways associated with private networks. The users of the satellite network communications services access the satellite network system via private terrestrial networks. (abstract, paragraph 16)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the private network of Modzelesky et al into the mobile auxiliary communications facility of Gutman et al and video module of Lesesky et al in order to meet specified technical performance criteria and interact with the network communication controllers.

Consider **claims 2, 17, 34** and as **applied to claims 1, 16, and 30 above, respectively**, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein a second node provides dial tone via satellite to telephonic equipment at a site of deployment of the platform. (Gutman et al: figure 2, paragraph 39; the mobile auxiliary communications facility (shown in figure 1) is provided in the form of one or more mobile communication shelters, such as first communications shelter, second communications shelter, and Nth communications shelter. Each of the communications shelters is equipped with a mechanism to implement telephonic communications and IP data communications at a communications-disrupted facility or at a remote location).

Consider **claims 4 and 19**, and as applied to **claims 1 and 16** above, respectively, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein the wireless module includes a VOIP router and a conversion/deconversion mechanism for providing voice, audio, and/or speech signals to the VOIP router. (Gutman et al: paragraphs 18, 23, and 42)

Consider **claims 5, 20, 35** and as applied to **claims 1, 16, and 30** above, respectively, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein the wireless module includes networking module includes an ATM switch for multiplexing, demultiplexing and allocating bandwidth to combine voice and data packets into a single composite data channel. (Gutman et al: abstract, paragraphs 23, 31, and 42)

Consider **claims 6, 21, and 36** and as applied to **claims 5, 20, and 30** above, respectively, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein the ATM switch provides a wired or a wireless LAN with encryption. (Gutman et al: paragraphs 16, 23, 31, and 42)

Consider **claims 8 and 23**, and as applied to **claims 1 and 16** above, respectively, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein the networking module accepts a variety of commercial and private telephony services and converts them both in signal type, conditioning and protocol for distribution to and from the platform. (Gutman et al: paragraphs 18, 23 and 31)

Consider **claims 10, 25, and 37**, and as **applied to claims 1, 16, and 30 above**, respectively, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein the platform provides telephonic and data communication networks without relying on regional landline communication links. (Gutman et al: figures 1 and 2; paragraphs 21 and 24)

Consider **claim 11**, and as **applied to claim 1 above**, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein the mobile communications infrastructure platform further comprises an earth station. (Gutman et al: figures 1 and 2)

Consider **claims 12 and 26**, and as **applied to claims 1 and 16 above, respectively**, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein an analog switch coupling said VOIP interface to a micromatrix and said land mobile radio. (Gutman et al: figures 1 and 2, paragraphs 28, 30 and 42)

Consider **claim 13**, and as **applied to claim 1 above**, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein said infrastructure platform is installed in a vehicle. (Lesesky et al: paragraph 15)

Consider **claims 14, 29, and 38**, and as applied to **claims 1, 16, and 30** above, respectively, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein compatible methods and equipment for accelerating throughput for standard protocols through satellite channels or any other channel with a high latency. (Gutman et al: paragraphs 23 and 42)

Consider **claim 15**, and as applied to **claim 1** above, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein the wireless module provides multiple cross-bands wirelessly over an encrypted wireless link such that a first land mobile radio operating on a first frequency or hopset is linked via the platform to a second land mobile radio operating on a second frequency or hopset, thereby enabling communications between the first and second land mobile radios. (Gutman et al: figure 2, paragraphs 39-47)

Consider **claim 27**, and as applied to **claim 16** above, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein said system is a mesh configuration (Gutman et al: figure 2, paragraphs 39-47)

Consider **claim 28**, and as applied to **claim 16** above, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein said system is a hub configuration (figures 1 and 2, paragraphs 28, 32, and 45-46; read as gateway hub)

Consider **claim 31**, and as applied to **claim 30** above, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein the second node is a second said mobile communications infrastructure platform. (Gutman et al: figure 2, paragraphs 37-47)

Consider **claim 32**, and as applied to **claim 30** above, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein the second system node is an earth station. (Gutman et al: figure 2, paragraphs 37-47)

Consider **claim 33**, and as applied to **claim 30** above, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention wherein positioning the vehicle to optimize satellite look angles and minimize a dead zone of an antenna pedestal (Lesesky et al: paragraphs 18-20); deploying vehicle stabilization jacks (Lesesky et al: paragraph 61-65); providing an on-site-generated power source for the platform (paragraphs 38, 40, 48); and providing an antenna controller for initializing GPS and a flux gate compass (Lesesky et al: paragraph 8).

**Claims 3 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gutman et al (US Patent Application Publication #2002/0101831 A1)** in view of **Lesesky et al (US Patent Application Publication #2004/0233284 A1)** and in further view of **Modzelesky**

Art Unit: 2618

**et al (US Patent Application Publication #2001/0012775 A1) and in further view of Karabinis (US Patent Application Publication #2002/0098802 A1).**

Consider **claims 3 and 18**, and as applied to **claims 1 and 16** above, respectively, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention except for wherein the private cellular network is a cellular base station supporting Advanced Mobile Phone Service (AMPS) protocol or Code-Division Multiple Access (CDMA) protocol.

In related art, Karabinis discloses a mobile satellite communications system wherein the air interface standards comprise of CDMA air interface standard. (abstract)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the CDMA standard of Karabinis into the private network of Modzelesky et al, the mobile auxiliary communications facility of Gutman et al, and video module of Lesesky et al in order to spread across a relatively wide frequency band by the action of the spreading codes.

**Claims 7 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gutman et al (US Patent Application Publication #2002/0101831 A1)** in view of **Lesesky et al (US Patent Application Publication #2004/0233284 A1)** and in further view of **Modzelesky et al (US Patent Application Publication #2001/0012775 A1)** and in further view of **Liu et al (US Patent Application Publication #2003/0043785 A1).**

Consider **claims 7 and 22**, and as applied to **claims 1 and 16** above, respectively, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose a LAN connected to a data network that includes at least one of the internet, a propriety corporate network, or a governmental communications networks (Gutman et al: figure 2), but fail to disclose a DSO interface for connecting to a telephonic PSTN network.

In related art, Liu et al disclose a DSO interface for connecting to a telephonic PSTN network. (figure 3, paragraph 44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the DSO interface of Liu et al into the private network of Modzelesky et al, the mobile auxiliary communications facility of Gutman et al, and video module of Lesesky et al in order to decide the connection method.

**Claims 9 and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gutman et al (US Patent Application Publication #2002/0101831 A1)** in view of **Lesesky et al (US Patent Application Publication #2004/0233284 A1)** and in further view of **Modzelesky et al (US Patent Application Publication #2001/0012775 A1)** and in further view of **Veschi (US Patent Application Publication #2002/0161453)**.

Consider **claims 9 and 24**, and as applied to **claims 1 and 16** above, respectively, Gutman et al, as modified by Lesesky et al and Modzelesky et al, disclose the claimed invention except for wherein the networking module accepts DS0, DS1, T1 and PRI and converts to FXS

Art Unit: 2618

(foreign exchange station) and telephony system that accepts FXO (foreign exchange office) analog dial tone and converts to DS0, DS1, T1 and PRI.

In related art, Veschi discloses a method and apparatus for integrating data and telephony services wherein the analog telephone adaptor, which has two voice ports (known as FXS ports) that converts traditional phones into IP-enabled phones. (paragraphs 7-10)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the conversion to FXS of Veschi into the private network of Modzelesky et al, the mobile auxiliary communications facility of Gutman et al, and video module of Lesesky et al in order to eliminate the ability to converge separate telephony and data networks into one network.

### *Conclusion*

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

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Art Unit: 2618

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bobbak Safaipour whose telephone number is (571) 270-1092. The Examiner can normally be reached on Monday-Friday from 9:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*Bobbak Safaipour*  
B.S./bs

January 30, 2007

EDAN ORGAD  
PRIMARY PATENT EXAMINER

*Edan Orgad* 1/31/07